

200100079

# THE UNITED STAYES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Hioneer Hi-Bred International, Inc.

PICTORS, THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID, APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPERIISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE VEPURPOSE; OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT DED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'95B97'

In Jestimony Thereof I have hereunto set my hand and caused the seal of the Hant Harrety Hertection Office to be affixed at the City of Washington, D.C. this eighth day of May, in the year of our Lord two thousand one.

alank. Port

Aiing Commissioner Plant Variety Protection Office Agricultural Marketing Service In Menemon\_

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

### APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)

	on baraon olulement on re	,	İ				
1. NAME OF OWNER Pioneer Hi-Bred Internation	al, Inc.			TEMPORARY DESIGNA EXPERIMENTAL NAME	TION OR	2. VARIETY NAME 95B97	
4. ADDRESS (Street and No., or R.F.D. No., Cit 7300 N. W. 62 <sup>nd</sup> Avenue P. O. Box 1004 Johnston, IA 50131	ty, State, and ZIP Code, and Count	try)	5. TELEPHONE (include area code) 515-254-2638			FOR OFFICIAL USE ONLY	
				6. FAX (include area cod 515-253-2288	le) 2 (	0 1 0 0 0 7 0 FILING DATE	
7. IF THE OWNER NAMED IS NOT A "PERSON ORGANIZATION (corporation, partnership, as:	", GIVE FORM OF sociation, etc.)	8. IF INCORPORA STATE OF INCO	TED, GIVE DRPORATION	9. DATE OF INCORPOR May 6, 1926	ATION	January 25,20	
10. NAME AND ADDRESS OF OWNER REPR Daria Schmidt, Ph.D. 7300 NW 62 <sup>pd</sup> Ave. P.O. Box 1004 Johnston, Iowa 50131-1004	<i>J</i> е 71 Р.	ean Bromert ( 00 NW 62 <sup>nd</sup> Av 0. Box 1000 hnston, Iowa	copy)	receive all papers)		FILING AND EXAMINATION FEES:  \$ 705  BATE JOM, 25,0  CERTIFICATION FEE:  \$ 300  DATE \$ /2/0/	
11. TELEPHONE (Include area code) 12 515-254-2638 5	2. FAX (Include area code) 15-253-2288 -	ť	MAIL dtdh@phibred	.com	14. CRC Soybean	DP KIND (Common Name) n	
18. CHECK APPROPRIATE BOX FOR EACH ATT reverse)  a.	story of the Variety ss f Variety of the Variety (Optional) of the Owner's Ownership reated seeds or, for tuber propagat depositied and maintained in an a,	ted varieties, pproved public	20. DOES THE OVARIETY BE 1  IF YES, WHICH  21. DOES THE OVARIETE AS THE OVARIE	EED? See Section 83(a) or (if "yes", answer items 20 and 21 below)  WINER SPECIFY THAT SEED or (IMITED AS TO NUMBER OF 64 H CLASSES? FOUNDATION ON THE CLASSES? FOUNDATION ON THE CLASSES ON THAT THE CLASSES ON THE CLA	OF THIS CLASSES? THON FACES BE S?	NO (If "no," go to item 22)  YES NO  REGISTERED CERTIFIED  YES NO  REGISTERED CERTIFIED	
22. HAS THE VARIETY (INCLUDING ANY HARVE FROM THIS VARIETY BEEN SOLD, DISPOSE OTHER COUNTRIES?  YES  IF YES, YOU MUST PROVIDE THE DATE OF FOR EACH COUNTRY AND THE CIRCUMST.	D OF, TRANSFERRED, OR USED  NO  FIRST SALE DISPOSITION TRA	O IN THE U. S. OR	PROPERTY RI YES  IF YES, GIVE C	TY OR ANY COMPONENT OF GHT ( <i>PLANT BREEDER'S RIC</i> OUNTRY, DATE OF FILING C UMBER. ( <i>Pl</i> ease use space in	EHT OR PATE    X   N   R ISSUANCE	IO E AND ASSIGNED	
24. The owners declare that a viable sample of bas for a luber propagated variety a tissue culture w The undersigned owner(s) is(are) the owner of and is entitled to protection under the provisions Owner(s) is(are) informed that false representate	this sexually reproduced or tuber o s of Section 42 of the Plant Variety	propagated plant varie Protection Act.	ity, and believe(s) tha	f upon request in accordance voertificate.  t the variety is new, distinct, un	rith such regu	lations as may be applicable, or	
SIGNATURE OF OWNER  David H. Sch	mid		SIGNATURE OF O	WNER	,		
AME (Please print or type) Paria H. Schmidt			NAME (Please print	or type)			
APACITY OR TITLE birector, Associative lenetics/Technology Integrati T-470 (2-99) designed by the Plant Variety Protection		Replaces STD-470 (6-	CAPACITY OR TITE		otions and int	DATE	

#### Exhibit A. Origin and Breeding History of the Variety

Soybean Variety 95B97

Variety 95B97 evolved from a 1992 cross of A5979/S5960.

It is an F5-derived variety, which was advanced to the F5 generation by modified single seed descent. The F6 progeny row of 95B97 was grown in the summer of 1995. Subsequently, 95B97 has undergone five years of extensive testing and purification and has been observed by the breeder to be uniform and stable for all plant traits from generation to generation, with no evidence of variants. On the basis of yield potential, and resistance to races 3 and 14 of soybean cyst nematode, variety 95B97 was assigned a commercial number.

The purification block was grown during the summer of 1998 and 80 sublines were bulked for increase. 2.6 acres of 95B97 (breeders seed) were grown in the summer of 1999. 108 acres of parent seedstock (foundation seed equivalent) were grown in the summer of 2000 and 4,635 bushels harvested.

#### Exhibit B. Statement of Distinctness

Soybean Variety 95B97

Variety 95B97 is most similar to Variety 95B95. Both varieties have purple flowers, gray pubescence, and yellow seeds with imperfect black hila. However, 95B97 has resistance to race 3 and 14 of Soybean Cyst Nematode and is susceptible to Roundup branded herbicides whereas 95B95 is susceptible to race 3 and 14 of Soybean Cyst Nematode and is resistant to Roundup branded herbicides.

Variety 95B97 is also similar to Variety 96B21. Both varieties have purple flowers, gray pubescence, and yellow seeds with imperfect black hila. However, 95B97 has resistance to race 3 and 14 of Soybean Cyst Nematode and is susceptible to Roundup branded herbicides whereas 96B21 is susceptible to race 3 and 14 of Soybean Cyst Nematode and is resistant to Roundup branded herbicides.

Variety 95B97 is also similar to A5704 from Asgrow Seeds. Both varieties have purple flowers, gray pubescence, and yellow seeds with imperfect black hila. However, 95B97 does not have the Als1 gene for tolerance to certain sulfonylurea herbicides whereas A5704 does have the Als1 gene for tolerance to certain sulfonylurea herbicides.

Variety 95B97 is somewhat similar to Variety S59-60 from Novartis Seeds. Both varieties have purple flowers and are has resistance to race 3 and 14 of Soybean Cyst Nematode. However, 95B97 has gray pubescence and yellow seeds with imperfect black hila whereas S59-60 has tawny pubescence and yellow seeds with black hila.

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved - OMB No. 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille , large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705 EXHIBIT C (Soybean)

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF APPLICANT(S) Pioneer Hi-Bred International	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	PYPO NUMBER   10 0 0 7
7300 62 <sup>nd</sup> Avenue	VARIETY NAME 95B97
P.O. Box 1004	93197
Johnston, IA 50131-1004	TEMPORARY OR EXPERIMENTAL, DESIGNATION
PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describes the variebelow.  Place a zero in the first box (e.g. 9 9 9 0 0 9 ) when number is either 99 or less of quantitative	r 9 or less respectively. Data for
plant characters should be based on a minimum of 100 plants. Comparative data should be determined from	
Horticultural Society or any recognized color standard may be used to determine plant colors; designate system	n used:
Please answer all questions for your variety; lack of response may delay progress of your application.  A. MORPHOLOGY	·
Seed Shape:	
3 = Elongate $4 = Elongate-Flattened$ (L/T ratio > 1.2; T/W ratio < 1.2) (L/T ratio > 1.2; T/W ratio > 1.2)	
Seed Coat Color:	
1 = Yellow 2 = Green 3 = Brown 4 = Black	5 = Other (Please Specify)
Seed Coat Luster:	
1 = Dull   2 = Shiny	
Seed Size:	
1 2 grams/100 seeds	
Iilum Color:	
5 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 6 = Black 7 = Other (Please Specify)	= Imperfect Black

Cotyledon Color:

1 = Yellow2 = Green

Seed Protein Peroxidase Activity:

1 = Low2 = High

Hypocotyl Color:

1 = Green

2 = Green with Bronze ('Evans' or 'Davis') Bands below Cotyledons ('Woodworth' or 'Tracy')

3 = Light Purple below Cotyledons ('Beeson' or 'Pickett 71')

4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaflet Shape:

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (*Please Specify*)

Flower Color:

1 = White

2 = Purple

3 = White with a Purple Throat

Pod Color:

1 = Tan

2 = Brown

3 = Black

**Pubescence Color:** 

1 = Gray

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

1 = Determinate

2 = Semi - Determinate

3 = Indeterminate

4 = Intermediate

Maturity Group:

1 = 0006 = III11 = VIII 2 = 007 = IV12 = IX

3 = 08 = V13 = X

9 = VI14 = XI  $5 = \Pi$ 10 = VII15 = XII

**Maturity Subgroup:** 

Please enter a value from 0 - 9

**B. DISEASE REACTIONS** 

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

**Bacterial** 

Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)

Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

Fung	al									:	
1	Brown Spot	(Sept	oria glycine.	s Hemmi	)						
	Frogeye Lea	af Spo	t ( <i>Cercospo</i> i	ra sojina i	Hara)						
0	race 1			0	race 2		0	race 3	0	race 4	
0	race 5			0	race 6			Other (Ple	ease Spec	_ ify)	
0	Target Spot	(Cory	nespora cas	siicola (B	erk. & Curt.	) Wei)					
0	Downey Mil	dew (	Peronospora	trifolior	um var. man	ichurica (I	Naum.) Sy	yd. ex Gäum	)		
0	Powdery Mi	ldew (	Microsphae	ra diffus	a Cke. & Pk.	)		•			
0	Brown Stem	Rot (	Phialophora	gregata	(Allington &	Chamber	lain) W.	Gams.)			
0	Stem Canker	(Dia <sub>l</sub>	orthe phase	eolorum (	(Cke. & Ell.)	Sacc. var.	caulivord	Athow & C	Caldwell)		
1	Pod and Ster	n Blig	ht ( <i>Diaport)</i>	ie phaseo	olorum (Cke.	& Ell.) Sa	cc. var. s	<i>ojae</i> (Lehma	n) Wehn	n.)	
0	Purple Seed	Stain (	(Cercospora	kikuchii	(T. Matsu. &	& Tomoyas	su) Garde	ener)			
1	Rhizoctonia l	Root I	Rot ( <i>Rhizoct</i>	onia sola	ni Kühn)		·	÷			
hytop	ohthora Root R	ot (Ph	ytophthora	megaspei 	rma Drechs.	f. sp. <i>glyci</i>	<i>nea</i> (Kua	n & Erwin))			
1	race 1	0	race 8	0	race 15	0	race 22				
0	race 2	0	race 9	0	race 16	0	race 23				
0	race 3	0	race 10	0	race 17	0	race 24				
0	race 4	0	race 11	0	race 18	0	race 25				
0	race 6	0	race 12	0	race 19 race 20	0	race 26		es.	1	
0	race 7	0	race 14	0	race 21		Other (	Please Specij	(עדו		·
0		0	1800 14	0	1400 21				-		
1	Bud Blight (T	obacc	o Ringspot	Virus)							
1	Yellow Mosai	c (Bea	n Yellow M	losaic Vi	rus)						

0 = Not Tested

1 = Susceptible

2 = Resistant

B. DISEASE REACTIONS (Continued)

В. В	ISEASE REACTION	(S (Continued)	0 = Not Tested	1 = Susceptible	2 = Resistant	J = Tolerant / J
1	Cowpea Mosaic (C	Cowpea Chlorotic	Virus)			
1	Pod Mottle (Bean 1	Pod Mottle Virus	)			
1	Seed Mottle (Soybo	ean Mosaic Virus	)			
Nema	tode				4	
Soybe	an Cyst Nematode ( <i>H</i>	leterodera glycines	s Ichinohe)	\$		
0	race 1	0 race 4	0 race 9	)		
0	race 2	0 race 5	2 race 1	14		
2	race 3	0 race 6	Other	(Please Specify)		
0	Lance Nematode (A	Hoplolaimus colun	nbus Sher)			
0	Southern Root Kno	ot Nematode ( <i>Mel</i> o	oidogyne incognita (I	Kofoid & White) Chi	twood)	
0	Northern Root Kno	ot Nematode ( <i>Mel</i>	oidogyne hapla Chit	wood)		
1	Peanut Root Knot I	Nematode ( <i>Meloia</i>	logyne arenaria (Nea	ıl) Chitwood)		
0	Reniform Nematod	e ( <i>Rotylenchus rer</i>	<i>uiformus</i> Linwood &	Olivera)		
0	Javanese Nematode	(Meloidogyne jav	anica (Treub) Chity	vood)		
0	Other Nematode (P	lease Specify)				
C. PH	YSIOLOGICAL RE	SPONSES	0 = Not Tested	1 = Susceptible	2 = Resistant	3 = Tolerant
0	Iron Chlorosis on C	alcareous Soil				
0	Phosphorus		0 Other	(Please Specify)		
0	Boron					
	Aluminum					
	Salt					
0	Drought					

D. INSECT REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resist	ant 3 =	O O Toleran	070 nt
Mexican Bean Beetle (Epilachna va	rivestis Mulsant)	·				
O Potato Leaf Hopper (Empoasca fabo	ae (Harris))					
O Other (Please Specify)						
E. HERBICIDE REACTIONS	0 = Not Tested	1 = Susceptible	2 = Resist	ant		
0 Metribuzin			;			
0 Bentazone			·			
1 Sulfonylurea						
1 Glyphosate						
0 Glufosinate						
0 Pendimethalin						
Other (Please Specify)		<del></del>				
F. TRANSGENIC COMPOSITION				<del> </del>		
Has the development of the subject variety in or, the removal of genetic material from the a If yes, please complete the following informat	application variety?			ism other		oybean, NO
1. Please state the vector's name:						
2. Please state the vector components:						
3. Please describe the genetic material succe	ssfully transferred in	ito the subject variety:				
l. Please describe the insertion protocol:			•			
A literature citation(s) explaining the four in Transgenic Composition" portion of this for	formation requests a m.	above may be an accep	table altern	ative to co	mpletion	ı of the
			· · · · · ·			
G. BIOCHEMICAL MARKERS		<del></del>			-	
lease describe any biochemical information he.g. Simple Sequence Repeats, Restriction Frages if necessary.	iere, which you belie agment Length Polyr	ve will be helpful in fu norphisms, Isozymic C	rther descri Characteriza	bing the station). Use	ubject va addition	ıriety nal

H. COMMENTS

### Exhibit D. Additional Description of the Variety

Soybean Variety 95B97

In Exhibit C we have identified variety 95B97 as susceptible to bacterial blight, brown spot, pod and stem blight, rhizoctonia root rot, bud blight, yellow mosaic, cowpea mosaic, pod mottle and seed mottle.

This does not mean that variety 95B97 is any worse for these problems than other varieties of similar maturity. Rather, we do not consider 95B97 to be immune to these problems. Therefore, we have chosen to be conservative and have identified the line as "susceptible".

Variety 95B97 is a late Group V variety. If Group V varieties are divided into tenths, the relative maturity of 95B97 is 5.9.

	reproductions.	ORM APPROVED - OMB No. 0581-005
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in 1974 (5 U.S.C. 552a) and the Paper I	accordance with the Privacy Act of Reduction Act (PRA) of 1995.
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to detectificate is to be issued (7 U.S.C. 24 confidential until the certificate is issued.)	121). The information is held
NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	2. VARIETY NAME
Pioneer Hi-Bred International, Inc.	ON EXPERIMENTAL NUMBER	95B97
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
7300 NW 62 <sup>nd</sup> Avenue P. O. Box 1004	515-254-2638	515-253-2288
Johnston, IA 50131-1004	7. PVPO NUMBER	-
	2001000	77
8. Does the applicant own all rights to the variety? Mark an "X" in the If no, please explain.	appropriate block.	X YES NO
,		A TES NO
9. Is the applicant (individual or company) a U.S. National or a U.S. b	ased company?	
If no, give name of country		X YES NO
10. Is the applicant the original owner?  X YES NO	If no, please answer one of the foll	owing:
a. If the original rights to variety were owned by individual(s), is (a	are) the original owner(s) a U.S. Nationa	al(s)?
YES NO If no, give name of country	1	
b. If the original rights to variety were owned by a company(ies),	•	sed company?
YES NO If no, give name of country		ou osmpany.
11. Additional explanation on ownership (If needed, use the reverse for	or extra space):	
11. Additional explanation on ownership (If needed, use the reverse for	or extra space):	
11. Additional explanation on ownership (If needed, use the reverse fo	or extra space):	
11. Additional explanation on ownership (If needed, use the reverse for	or extra space):	
11. Additional explanation on ownership (If needed, use the reverse for	or extra space):	
11. Additional explanation on ownership (If needed, use the reverse for	or extra space):	
	or extra space):	
Please Note:		
Please Note:	ees) who meet the following criteria:	of a UPOV member country, or es.
Please Note: Plant variety protection can only be afforded to the owners (not license). If the rights to the variety are owned by the original breeder, that pe	ees) who meet the following criteria: rson must be a U.S. national, national of the U.S. for the same genus and specie ed the original breeder(s), the company	es. must be U.S. based, owned by
Please Note:  Plant variety protection can only be afforded to the owners (not license). If the rights to the variety are owned by the original breeder, that pe national of a country which affords similar protection to nationals of 2. If the rights to the variety are owned by the company which employed nationals of a UPOV member country, or owned by nationals of a country.	ees) who meet the following criteria: rson must be a U.S. national, national of the U.S. for the same genus and specie ed the original breeder(s), the company ountry which affords similar protection to	must be U.S. based, owned by nationals of the U.S. for the same

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity employer.

STD-470-E (07-97) (Destroy previous editions). Electronic version designed using WordPerfect InForms by USDA-AMS-IMB.